

CLAIMS

1. A method to process at least one document in a domain, the method including:
 - modeling the domain with a plurality of domain models using an ontological system;
 - representing each document as a collection of at least one domain model;
 - and
 - populating the collection of the at least one domain model that are used to represent the document with values corresponding to properties of the document being represented.
2. The method of claim 1, wherein a domain model relates to at least one of a simple type and a complex type, and:
 - if a property for a domain model is of the simple type, populating the domain model with a value according to the document being represented; and
 - if a respective property type for a domain model is of the complex type, selectively adding another domain model as the value for that property, according to the document being represented.

3. The method of claim 2, which includes:

searching the collection of the at least one domain model to determine a

subset of the at least one document which matches the search

criteria.
4. The method of claim 2, which includes:

analysis of the collection of the at least one domain model that represent a

collection of documents by determining values of properties from

at least one model.
5. The method of claim 2, which includes:

analyzing the collection of the at least one domain model that represents a

collection of documents by determining what models are in the

collection of documents.
6. The method of claim 2, which includes:

setting values in models that represent supplemental information that is

not in the document being represented but is associated to the

document being represented.
7. The method of claim 2, wherein determining which models to use to
represent the document and adding values to properties includes:

an automated process whereby a list of conditions must be met in the

document to populate a property with a value or set of values.

8. The method of claim 2, wherein the models selected to represent the document and the properties set in the models are determined by a person adding the document to a collection of documents during the submission process.
9. A system to process the at least one document in a domain, the system including:
- a modeler to model the domain with a plurality of domain models using an ontological system;
 - a representer to represent each document as a collection of at least one domain model; and
 - a populator to populate the at least one domain model that are used to represent the document with values corresponding to properties the document being represented.
10. A system to process at least one document in a domain, the system including:
- a first means for modeling the domain with a plurality of domain models using an ontological system;
 - a second means for representing each document as a collection of at least one domain model; and

a third means for populating the at least one domain model that are used
to represent each document with values corresponding to
properties of the document being represented.

11. A machine readable medium storing a set of instructions that, when
executed by a machine, cause the machine to:

model the domain with a plurality of domain models using an ontological
system;

represent each document as a collection of at least one domain model; and

populate the at least one domain model that are used to represent the

document with values corresponding to properties of the document
being represented.